senhorinha de fÃ¡tima teixeira

List of Publications by Year
in descending order

150 papers	983 citations	516710 16 h-index	526287 27 g-index
157 all docs	157 docs citations	157 times ranked	815 citing authors

#	Article	IF	Citations
1	Thermodynamic and economic optimization of a solar-powered Stirling engine for micro-cogeneration purposes. Energy, 2016, 111, 1-17.	8.8	86
2	Influence of arterial mechanical properties on carotid blood flow: Comparison of CFD and FSI studies. International Journal of Mechanical Sciences, 2019, 160, 209-218.	6.7	69
3	3D Printing Techniques and Their Applications to Organ-on-a-Chip Platforms: A Systematic Review. Sensors, 2021, 21, 3304.	3.8	60
4	Assessment of the Stirling engine performance comparing two renewable energy sources: Solar energy and biomass. Renewable Energy, 2020, 154, 581-597.	8.9	51
5	Blood Flow Modeling in Coronary Arteries: A Review. Fluids, 2021, 6, 53.	1.7	34
6	Testing thermal comfort of trekking boots: An objective and subjective evaluation. Applied Ergonomics, 2013, 44, 557-565.	3.1	33
7	Design of a solar dish Stirling cogeneration system: Application of a multi-objective optimization approach. Applied Thermal Engineering, 2017, 123, 646-657.	6.0	31
8	CFD Modeling of Combustion in Biomass Furnace. Energy Procedia, 2017, 120, 665-672.	1.8	31
9	Experiments in a large-scale venturi scrubber. Chemical Engineering and Processing: Process Intensification, 2009, 48, 59-67.	3.6	27
10	Organ-on-a-Chip Platforms for Drug Screening and Delivery in Tumor Cells: A Systematic Review. Cancers, 2022, 14, 935.	3.7	27
11	An economic perspective on the optimisation of a small-scale cogeneration system for the Portuguese scenario. Energy, 2012, 45, 436-444.	8.8	26
12	3D Printed Biomodels for Flow Visualization in Stenotic Vessels: An Experimental and Numerical Study. Micromachines, 2020, 11, 549.	2.9	24
13	In vitro Biomodels in Stenotic Arteries to Perform Blood Analogues Flow Visualizations and Measurements: A Review. Open Biomedical Engineering Journal, 2020, 14, 87-102.	0.5	24
14	Hemodynamic study in 3D printed stenotic coronary artery models: experimental validation and transient simulation. Computer Methods in Biomechanics and Biomedical Engineering, 2021, 24, 623-636.	1.6	23
15	Visualization and Measurements of Blood Cells Flowing in Microfluidic Systems and Blood Rheology: A Personalized Medicine Perspective. Journal of Personalized Medicine, 2020, 10, 249.	2.5	23
16	Polydimethylsiloxane mechanical properties: A systematic review. AIMS Materials Science, 2021, 8, 952-973.	1.4	20
17	Fluidâ€“Structure Interaction study of carotid blood flow: Comparison between viscosity models. European Journal of Mechanics, B/Fluids, 2020, 83, 226-234.	2.5	18
18	Experiments in large scale venturi scrubber. Chemical Engineering and Processing: Process Intensification, 2009, 48, 424-431.	3.6	17

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19	2D PIV analysis of the flow dynamics of multiple jets impinging on a complex moving plate. International Journal of Heat and Mass Transfer, 2022, 188, 122600.	4.8	16
20	Development of new spacer device geometry: a CFD study (Part I). Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 825-833.	1.6	15
21	Computational Simulations in Advanced Microfluidic Devices: A Review. Micromachines, 2021, 12, 1149.	2.9	15
22	Application of Taguchi Method for the Analysis of a Multiple Air Jet Impingement System with and without Target Plate Motion. International Journal of Heat and Mass Transfer, 2021, 176, 121504.	4.8	14
23	Multi-Objective Optimization of Solar Thermal Systems Applied to Portuguese Dwellings. Energies, 2020, 13, 6739.	3.1	14
24	A quasi-one-dimensional model for gas/solids flow in venturis. Powder Technology, 1999, 102, 281-288.	4.2	13
25	Wetting behaviour of SAC305 solder on different substrates in high vacuum and inert atmosphere. Journal of Materials Science: Materials in Electronics, 2015, 26, 5106-5112.	2.2	13
26	Thermal comfort assessment of a surgical room through computational fluid dynamics using local PMV index. Work, 2015, 51, 445-456.	1.1	13
27	Influence of Operating Conditions on the Thermal Behavior and Kinetics of Pine Wood Particles Using Thermogravimetric Analysis. Energies, 2020, 13, 2756.	3.1	13
28	The Potential of Renewable Energy in Timor-Leste: An Assessment for Biomass. Energies, 2019, 12, 1441.	3.1	11
29	Contact angle measurement of SAC 305 solder: numerical and experimental approach. Journal of Materials Science: Materials in Electronics, 2016, 27, 8941-8950.	2.2	10
30	Integrating Science, Technology, Engineering and Mathematics contents through PBL in an Industrial Engineering and Management first year program. Production, 2019, 29, .	1.3	10
31	The integration of spheroids and organoids into organ-on-a-chip platforms for tumour research: A review. Bioprinting, 2022, 27, e00224.	5.8	10
32	Application of laser anemometry for measuring critical bed shear stress of sediment core samples. Continental Shelf Research, 2008, 28, 2718-2724.	1.8	9
33	Numerical Study of the Unsteady Flow in Simplified and Realistic Iliac Bifurcation Models. Fluids, 2021, 6, 284.	1.7	9
34	Teaching differential equations in different environments: A first approach. Computer Applications in Engineering Education, 2010, 18, 555-562.	3.4	7
35	Thermal Conversion of Pine Wood and Kinetic Analysis under Oxidative and Non-Oxidative Environments at Low Heating Rate. Proceedings (mdpi), 2020, 58, .	0.2	7
36	Simulation of PMV and PPD Thermal Comfort Using EnergyPlus. Lecture Notes in Computer Science, 2019, , 52-65.	1.3	6

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37	Modeling Blood Pulsatile Turbulent Flow in Stenotic Coronary Arteries. International Journal of Biology and Biomedical Engineering, 2020, 14, .	0.3	6
38	Numerical simulation of blood pulsatile flow in stenotic coronary arteries: The effect of turbulence modeling and non-Newtonian assumptions. , 2020, , .		6
39	Fluid Flow and Structural Numerical Analysis of a Cerebral Aneurysm Model. Fluids, 2022, 7, 100.	1.7	6
40	Design Optimization of a Solar Dish Collector for Its Application With Stirling Engines. , 2015, , .		5
41	Influence of Copper Layer Content in the Elastic and Damping Behavior of Glass-Fiber/Epoxy-Resin Composites. Applied Composite Materials, 2016, 23, 1219-1228.	2.5	5
42	Effect of the Soldering Atmosphere on the Wettability Between Sn4.0Ag0.5Cu (in wt.%) Lead-Free Solder Paste and Various Substrates. Journal of Materials Engineering and Performance, 2018, 27, 5011-5017.	2.5	5
43	Numerical Modeling of the Wave Soldering Process and Experimental Validation. Journal of Electronic Packaging, Transactions of the ASME, 2022, 144, .	1.8	5
44	On Solving the Profit Maximization of Small Cogeneration Systems. Lecture Notes in Computer Science, 2012, , 147-158.	1.3	5
45	pMDI Sprays: Theory, Experiment and Numerical Simulation. , 0, , .		4
46	Thermal-economic optimisation of a CHP gas turbine system by applying a fit-problem genetic algorithm. International Journal of Sustainable Energy, 2018, 37, 354-377.	2.4	4
47	Reusing Equipment in Cells Reconfiguration for a Lean and Sustainable Production. Procedia Manufacturing, 2019, 39, 1038-1047.	1.9	4
48	Rheology of F620 solder paste and flux. Soldering and Surface Mount Technology, 2019, 31, 125-132.	1.5	4
49	Sawdust drying process in a large-scale pellets facility: An energy and exergy analysis. Cleaner Environmental Systems, 2021, 2, 100037.	4.2	4
50	Energy Performance of a Service Building: Comparison Between EnergyPlus and Revit. Lecture Notes in Computer Science, 2020, , 201-213.	1.3	4
51	A CFD Study of a pMDI Plume Spray. , 2014, , 163-176.		4
52	Experimental and numerical analysis of the influence of the nozzle-to-plate distance in a jet impingement process. International Journal of Thermodynamics, 2020, 23, 81-91.	1.0	4
53	Numerical Modeling and Optimization of an Air Handling Unit. Energies, 2021, 14, 68.	3.1	4
54	Analysis and monitoring of the combustion performance in a biomass power plant. Cleaner Engineering and Technology, 2021, , 100334.	4.0	4

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55	Evaluation of the Thermal Behaviour of Injection Moulds. International Polymer Processing, 2000, 15, 95-102.	0.5	3
56	Study of Devolatilization Rates of Pine Wood and Mass Loss of Wood Pellets. , 2017, , .		3
57	Comparison of CFD and FSI Simulations of Blood Flow in Stenotic Coronary Arteries. , 0, , .		3
58	Physical Characterization of Estuarine Sediments in the Northern Coast of Portugal. Journal of Coastal Research, 2010, 262, 301-311.	0.3	2
59	A lining for the Thermal Comfort of Trekking Boots â€“ Experimental and Numerical Studies. Research Journal of Textile and Apparel, 2011, 15, 50-61.	1.1	2
60	Optimal Design of Micro-Turbine Cogeneration Systems for the Portuguese Buildings Sector. , 2011, , .		2
61	Thermal-Economic Modeling of a Micro-CHP Unit Based on a Stirling Engine. , 2013, , .		2
62	Maximum Profit of a Cogeneration System Based on Stirling Thermodynamic Cycle. , 2014, , .		2
63	Modeling the Reflow Soldering Process in PCBâ€™s. , 2015, , .		2
64	CFD Modeling the Cooling Stage of Reflow Soldering Process. , 2016, , .		2
65	Creep Behavior of a Solder Paste With Bi Addition. , 2017, , .		2
66	Tutoring Experiences in PBL of Industrial Engineering and Management Program: Teachers vs Students. , 2017, , .		2
67	Combustion Modelling of a 20 kW Pellet Boiler. , 2018, , .		2
68	Assessment of Indoor Thermal Conditions in a Cinema Room Using CFD Simulation: A Case Study. Lecture Notes in Computer Science, 2019, , 40-51.	1.3	2
69	Experimental measurements of the shear force on surface mount components simulating the wave soldering process. Soldering and Surface Mount Technology, 2021, ahead-of-print, .	1.5	2
70	Thermal Simulation of a Supermarket Cold Zone with Integrated Assessment of Human Thermal Comfort. Lecture Notes in Computer Science, 2020, , 214-227.	1.3	2
71	Prediction of Solder Joint Reliability with Applied Acrylic Conformal Coating. Journal of Electronic Materials, 2022, 51, 273-283.	2.2	2
72	Energy, Thermal Comfort andÂPathologiesâ€”A Current Concern. Studies in Systems, Decision and Control, 2022, , 273-279.	1.0	2

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73	Project-Based Learning in a Mechanical Engineering Course: A new proposal based on student's views. International Journal of Mechanical Engineering Education, 2022, 50, 767-804.	1.0	2
74	Experimental Study and CFD Analysis of the VolumaticÂ® Spacer. , 2008, , .		1
75	Thermo-Economic Optimization in the Design of Small-Scale and Residential Cogeneration Systems. , 2009, , .		1
76	Experimental Validation of a CFD Model in a Thermal Environment Characterization. , 2011, , .		1
77	Modeling a Stirling Engine for Cogeneration Applications. , 2012, , .		1
78	Development and Optimization of a Small Scale Pellet Burner. , 2012, , .		1
79	Exergy Efficiency Optimization for Gas Turbine Based Cogeneration Systems. , 2013, , .		1
80	CFD Simulation of Two-Phase Flow in a Large Scale Venturi Scrubber. , 2013, , .		1
81	An Experimental Setup for API Assessment of a Valved Holding Chamber Device. , 2013, , .		1
82	Numerical Study of Regenerator Configuration in the Design of a Stirling Engine. , 2014, , .		1
83	Energy and Exergy Analysis of a Biomass Power Plant. , 2016, , .		1
84	Thermal Driven Dispersion of Smoke in a Parking Space. , 2016, , .		1
85	Rheology Characterization of Solder Paste. , 2017, , .		1
86	Application of DOE for the Study of a Multiple Jet Impingement System. Lecture Notes in Computer Science, 2019, , 3-11.	1.3	1
87	Building Energy Performance: Comparison Between EnergyPlus and Other Certified Tools. Lecture Notes in Computer Science, 2021, , 493-503.	1.3	1
88	Hemodynamic Studies in Coronary Artery Models Manufactured by 3D Printing. Lecture Notes in Mechanical Engineering, 2022, , 191-200.	0.4	1
89	Development of an Experimental Facility to Test Polymer Extrusion. , 2006, , .		1
90	Numerical and experimental studies in the development of new clothing materials. WIT Transactions on Engineering Sciences, 2006, , .	0.0	1

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91	Experimental and Numerical Study of Multiple Jets Impinging a Step Surface. Energies, 2021, 14, 6659.	3.1	1
92	Numerical study of blood fluid rheology in the abdominal aorta. WIT Transactions on Ecology and the Environment, 2008, , .	0.0	1
93	NUMERICAL ANALYSIS OF THE INFLUENCE OF THE JET-TO-JET SPACING BETWEEN TWO ADJACENT AIR JETS IMPINGING A FLAT PLATE. , 2019, , .		1
94	Survey of Existing Literature Data on the Biomass Combustion Behavior in Industrial Grate-Fired Boilers. , 2021, , .		1
95	Design Concept of a Non-invasive Tagging Device for Blue Sharks. Lecture Notes in Mechanical Engineering, 2023, , 80-90.	0.4	1
96	Analysis and Validation of a CFD Simulation of the Wind Through a Horizontal Axis Wind Turbine as an Actuator Disc with a Porous Jump Condition. Lecture Notes in Mechanical Engineering, 2023, , 187-199.	0.4	1
97	Numerical Optimization of a Gas Turbine Cogeneration Plant. , 2003, , 699.		0
98	Simplified Model for the Thermal Boundary Condition in Polymer Injection. , 2005, , 201.		0
99	Teaching Partial Differential Equations With Computer-Based Problem Solving. , 2006, , 121.		0
100	The Influence of Renal Branches on the Iliac Arteries Blood Flow. , 2008, , .		0
101	Computational Fluid Dynamics Applicable to Cloth Design. , 2009, , .		0
102	Study and Development of Spacers for Pressurized Inhaler Devices: A Project Review. , 2009, , .		0
103	Design and Development of a New Valve Geometry for Spacer Devices. , 2010, , .		0
104	The effect of oscillations on the flow patterns near a simulated bed. Coastal Engineering, 2010, 57, 684-693.	4.0	0
105	Computational Fluid Dynamics Simulations: an Approach to Evaluate Cardiovascular Dysfunction. , 0, , .		0
106	Development and Evaluation of a Micro-Cogeneration Prototype for Residential Applications. , 2010, , .		0
107	Modeling Flow Recirculation Inside a Holding Chamber. , 2012, , .		0
108	Teaching Heat Exchanger Design in Mechanical Engineering With CFD. , 2013, , .		0

#	Article	IF	Citations
109	Thermal comfort evaluation of an operating room through CFD methodology. , 2013, , 425-430.		0
110	Numerical Modeling of Wave Soldering in PCB. , 2014, , .		0
111	Sensibility Studies on a Transient Thermal Model of the Human Body. , 2014, , .		0
112	Indoor Ventilation in Hospital Operating Rooms. , 2014, , .		0
113	Jet Interaction in Cross Flow: Experimental and Numerical Model. , 2014, , .		0
114	VHC Performance Evaluation at Connstant Flow: 30 L/Min. , 2015, , .		0
115	Combined Tools for Surgical Case Packages Contents and Cost Optimization: A Preliminary Study. Procedia Computer Science, 2016, 100, 393-398.	2.0	0
116	A Correlative CFD Study Between Recirculation Area and FPM in VHC Design. , 2016, , .		0
117	Parametric Analysis of the Thermal Components of an Alpha-Stirling Engine for Cogeneration Applications. , 2017, , .		0
118	An Experimental Setup for Multiple Air Jet Impingement Over a Surface. , 2018, , .		0
119	Influence of the Microstructure on the Creep Behaviour of Tin-Silver-Copper Solder. , 2018, , .		0
120	A Numerical Study of Solder Paste Rolling Process for PCB Printing. , 2018, , .		0
121	Multi-objective Optimization of Solar Thermal Systems Applied to Residential Building in Portugal. Lecture Notes in Computer Science, 2019, , 26-39.	1.3	0
122	Corporate memory in the lean context. , 2019, , .		0
123	Work-in-Progress: Tailoring broad-spectrum, technology-centred IEM studies. , 2020, , .		0
124	Energy Performance of a Service Building: Comparison Between EnergyPlus and TRACE700. Lecture Notes in Computer Science, 2021, , 364-375.	1.3	0
125	The structure of information in the internationalization processes of universities. , 2021, , .		0
126	Axial variation of droplet distribution in a venturi scrubber. WIT Transactions on Ecology and the Environment, 2008, , .	0.0	0

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127	Contributions to the Study of Blood Flow in the Abdominal Aorta and Its Branches. , 2009, , .		0
128	Optimization of a Small Scale Pellet Boiler. , 2010, , .		0
129	Experimental analysis of particles flow inside the VolumaticÂ®spacer. , 2013, , .		0
130	Flow Structure Over a Simulated Bed for Costal Cohesive Sediment Erosion Studies. , 2013, , .		0
131	Thermal Hydraulic Modeling of Shell and Tube Heat Exchangers. , 2014, , .		0
132	Modeling the Thermal Environment in an Operating Room. , 2014, , .		0
133	Two Stage Atmospheric Burners: Development and Verification of a New Mass-Energy Balance Model. , 2014, , .		0
134	Testing a human thermal software using field investigation from an industrial plant. , 2015, , 329-332.		0
135	Thermal comfort assessment of orthopaedic health professionals in an operating room. , 2018, , 561-565.		0
136	CFD Simulation of an Alfa-Stirling Engine to Study the Geometrical Parameters on the Engine Performance. , 2019, , .		0
137	Measurement Errors and Uncertainty Estimation of an Experimental Set Up Using a 2D PIV Technique. , 2019, , .		0
138	Influence of the Applied Load on the Creep Behaviour of Tin-Silver-Copper Solder. , 2019, , .		0
139	Measurement Errors and Uncertainty Quantification of a Two-Dimensional-Particle Image Velocimetry Experimental Setup for Jet Flow Characterization. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2020, 6, .	1.1	0
140	Numerical Analysis of Single Jet Impinging a Flat and Non-flat Plate. Lecture Notes in Computer Science, 2020, , 487-495.	1.3	0
141	i9MASKS Project. Advances in Higher Education and Professional Development Book Series, 2022, , 271-289.	0.2	0
142	Influence of Plate Orifice in the Pre-Mixing of Gas-Powered Water Heaters. Proceedings (mdpi), 2020, 58, .	0.2	0
143	Experimental Study of Multiple Air Jets Impinging a Moving Flat Plate. , 2020, , .		0
144	Numerical Study of the Flow Inside a Modular Bag Filter From a Biomass Power Plant. , 2020, , .		0

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145	The Effect of Acrylic Conformal Coating in the Reliability of Solder Joints. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2022, 12, 676-681.	2.5	0
146	Numerical Simulation of the Flow Inside a Horizontal Closed Refrigerated Display Cabinet. , 2021, , .		0
147	Numerical Analysis of Multiple Jets Impinging on a Moving Surface. , 2021, , .		0
148	Numerical Simulation of Solder Paste Printing on Through-Hole Components. , 2021, , .		0
149	Steady Flow Studies of the Geometry Effects on the Recirculation Properties at the Iliac Bifurcation. , 2021, , .		0
150	i9Masks: From a Multidisciplinary Summer Project to a Non-Accredited Short Course. , 2021, , .		0